

In the Specification

Kindly replace paragraphs [0001] through [0017] with the following:

Related Application

This is a §371 of International Application No. PCT/FR2004/050675, with an international filing date of December 10, 2004 (WO 2005/062613 A1, published July 7, 2005), which is based on French Patent Application No. 03/51107, filed December 18, 2003.

Technical Field

~~The invention~~This disclosure relates to the field of interactive television.

~~The invention relates more specifically to a method that aims to allow access to an interactive television service by previously entering a code sent by mini-message, which can be, for example, in SMS-format.~~

Background

There are known solutions for accessing interactive pay television services in the previous state of the art. A classic solution consists of making the payment using a bank card. Other solutions are also known, such as payment by means of a surcharged modem connection.

~~The invention intends to solve the disadvantages of the previous state of the art by providing a method that enables access to an interactive pay television service by means of a mini-message.~~

Summary

~~For this purpose, the invention relates, in its most general sense,~~This disclosure is directed to a method of accessing an interactive television service ~~by means of~~with a code and a mini-message, characterised in that it comprises the following steps comprising:

[[-]] randomly ~~generation of~~generating a code C1 by an interactive television application implemented on an interactive television set;

~~[[-]]~~ sending of a mini-message containing the code C1 to a processing server ~~by means~~
~~of~~with a mobile telecommunications device;

~~[[-]]~~ ~~calculation of the~~calculating a code $C2 = F(C1)$ ~~by~~with the processing server;

~~[[-]]~~ resending of the code C2 ~~by~~with the processing server and ~~receipt of~~receiving the
code C2 on the mobile telecommunications device;

~~[[-]]~~ ~~entry of~~entering the code C2 by the user in the interactive television application;

~~[[-]]~~ ~~calculation by~~calculating the interactive application of $C1' = F^{-1}(C2)$ ~~[[,]]~~;

checking that $C1' = C1$ ~~[[,]]~~; and

enabling the user to access ~~said~~the service;

wherein F is a predefined function, and F^{-1} is the inverse function of F.

~~According to a first variant, said~~The mini-message ~~is~~may be in SMS format ~~[[,]]~~,

~~According to a second variant, said mini-message is in~~ MMS format ~~[[,]]~~ or

~~According to a third variant, said mini-message is in the form of an e-mail.~~

~~According to an embodiment of the invention, said~~The mini-message ~~is~~may be transmitted
across a mobile telecommunications network ~~[[,]]~~ or

~~According to another embodiment of the invention, said mini-message is transmitted across~~
the internet and/or a local wireless network.

Preferably, ~~said~~the service requires payment and ~~said~~the mini-message is surcharged.

~~The invention further relates to a~~A system for implementing the method, ~~comprising is also~~
disclosed and comprises at least a mobile telecommunications device, an interactive television set, a
mobile telecommunications network or a local wireless network, a digital television broadcasting
network and a processing server.

Brief Description of the Drawing

The ~~invention~~disclosure will be understood better from reading the description, provided below for purely explanatory purposes, of ~~an embodiment of the invention~~, selected aspects in reference to the appended figure[[s]], in which:

~~figure~~Fig. 1 shows ~~an~~one selected embodiment of the method ~~according to the invention~~.

Detailed Description

In the ~~embodiment of the invention shown in our~~selected example, a user has a television set connected to an interactive television decoder and a mobile telephone terminal that has capacity for sending and receiving SMS, MMS or e-mail messages. This terminal can be compatible with GSM, CDMA, GPRS, UMTS or any other digital telecommunications standard that supports sending and receiving mini-messages. It is also possible to use a PDA terminal (personal digital assistant) connected to a local wireless network (Wi-Fi, etc. or the like). It is understood that this example is non-exhaustive and that it is up to the person skilled in the ~~trade~~art to implement variations that adapt to each specific case.

The user ~~is~~may ~~watching~~ free-access interactive television programmes. At a given instant T, he/she decides to access an interactive pay television service. The interactive television application ~~implementing the method according to the invention~~ generates a code C at random and asks the user to enter this code C on his/her mobile terminal.

In ~~our~~the example, the code is taken from the natural numbers under $2^8 = 256$ and the function used is $Y = F(X) = 1/x^2$. This means that $X = F^{-1}(Y) = 1/\sqrt{Y}$.

The user then enters the code $C = N_1$ on his/her terminal and sends it in the form of an SMS message to a predefined number. In ~~our~~the example, the SMS is surcharged, in other words, the

mobile telecommunications operator bills the message at a higher price than normal SMS messages and a part of this extra charge is paid back to the interactive pay television service provider.

Kindly replace paragraphs [0019] through [0020] with the following:

The next step ~~consists of~~comprises the user entering R in a window of the interactive television application using his/her remote control. The interactive application calculates $F^{-1}(R) = 1/\sqrt{R}$ and checks that this value is the same, by approximation of calculations on real numbers by nearby computers, as N_1 . If the verification is successful, the interactive television application ~~authorises~~authorizes the user to access the paying service.

The ~~invention~~above method and apparatus/system is described ~~above~~merely as an selected example. It is understood that ~~people~~those skilled in the ~~trade~~art will be able to implement different variants ~~of the invention~~ without therefore departing from the ~~context of the patent~~spirit and scope of the appended claims.